

22. The method of claim 20 wherein the second spreading code is known to the communication site prior to the transmission of the first spread message signal over the radio communication channel.

23. The spread spectrum signal synchronizing system of claim 20 wherein the first message signal is substantially similar to the second message signal.

24. The spread spectrum signal synchronizing system of claim 20 wherein the second message signal is known to the communication site prior to the transmission of the first spread message signal over the radio communication channel.

25. A method of synchronizing a spread spectrum communication system, comprising:

- (a) generating a first spread message signal as a function of a first message signal and a first spreading code at a first communication site;
- (b) transmitting from the first communication site the first spread message signal over a radio communication channel;
- (c) receiving the first spread message signal from over the radio communication channel at a second communication site;
- (d) determining at the second communication site the first spreading code used to generate the received first spread message signal;
- (e) generating at the second communication site a second spread message signal as a function of a second message signal and a second spreading code associated with the determined first spreading code;
- (f) transmitting from the second communication site the second spread message signal over the radio communication channel;
- (g) receiving at the first communication site a second spread message signal from over the radio communication channel;
- (h) generating at the first communication site an estimated second spread message signal as a function of the second message signal and the second spreading code associated with the first spreading code; and
- (i) synchronizing the received and the estimated second spread message signals at the first communication site by using a sliding correlator to increment-

tally increase the phase shift between the received and the estimated second spread message signal until the received and the estimated second spread message signals are synchronized.

26. The method of claim 25 wherein the increase of the phase shift between the received and the estimated second spread message signal is limited to a predetermined maximum phase shift magnitude which is derived from known operating environment parameters of the first communication site.

27. The method of claim 25 wherein the first spreading code is substantially similar to the second spreading code.

28. The method of claim 25 wherein the second spreading code is known to both the first and second communication site prior to the first communication site transmitting the first spread message signal over the radio communication channel.

29. The method of claim 25 wherein the first message signal is substantially similar to the second message signal.

30. The method of claim 25 wherein the second message signal is known to both the first and second communication site prior to the first communication site transmitting the first spread message signal over the radio communication channel.

31. The method of claim 25 wherein the method further includes the step of the second communication site requesting the first communication site to begin transmitting the first spread message signal over the radio communication channel so that the second communication site can reduce the search range of possible phase shifts of possible spreading codes used to generate the received first spread message signal in the determining step.

32. The method of claim 25 wherein the method further includes the step of the first communication site notifying the second communication site that transmission of the first spread message signal over the radio communication channel is beginning so that the second communication site can reduce the search range of possible phase shifts of possible spreading codes used to generate the received first spread message signal in the determining step.

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